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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/538,351

03/29/2000

Katherine H. Guo

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EXAMINER

ENGLAND, DAVID E

ART UNIT

PAPER NUMBER

2143

DATE MAILED: 03/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/538,351

Applicant(s)

GUO ET AL.

Examiner

David E. England

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 October 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 10, 13, 31 and 32 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1 - 10, 13, 31 and 32 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Claims 1 – 10, 13, 31 and 32 are presented for examination.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 10, 13, 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eyal U.S. Patent No. 6484199 in view of Herz U.S. Patent No. 6029195.

4. As per claim 1, Eyal teaches a method for distributing a streaming multimedia (SM) object in a network having a content server which hosts SM objects for distribution over said network through a plurality of helpful servers (HSs) to a plurality of clients, said method comprising:

5. calculating at said content server a server hotness rating for said SM objects hosted thereon, (e.g. col. 12, lines 37 – 67 & col. 30, line 13 – col. 31, line 63);

6. performing a categorization process, wherein each of said SM objects hosted by said content server are categorized into one of a plurality of server hotness categories based on each of said SM object's calculated server hotness rating, (e.g. col. 12, lines 37 – 67 & col. 30, line 13 – col. 31, line 63); but does not specifically teach multicasting from said content server at least

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one of said SM objects hosted thereon to a fraction of said plurality of HSs in the network, said fraction being determined according to said SM object's hotness category.

7. Herz teaches multicasting from said content server at least one of said SM objects hosted thereon to a fraction of said plurality of HSs in the network, said fraction being determined according to said SM object's hotness category, (e.g. col. 45, lines 13 – 33). It would have been obvious to one skilled in the art at the time the invention was made to combine Herz with Eyal because it would be more efficient for a system to multicast data to a plurality of servers that could handle multiple users in a system that has potential to grow with more users and more media data that is being produced, (i.e. records and movies).

8. As per claim 2, Eyal teaches the step of associating a fraction to each of said plurality of predetermined hotness categories, (e.g. col. 8, line 46 – col. 25 & col. 26, lines 19 – 46 & col. 12, lines 37 – 67), but does not teach multicasting said SM objects. Herz teaches multicasting said SM objects, (e.g. col. 45, lines 13 – 33). It would have been obvious to one skilled in the art at the time the invention was made to combine Herz with Eyal because of similar reasons stated above.

9. As per claim 3, Eyal teaches the server hotness rating for each of said SM object's hosted by said content server is calculated as the sum of a plurality of helper hotness ratings, wherein the helper hotness rating for an SM object hosted by one of said plurality of HSs is defined as a total number of client requests for said SM object requested from said one of said plurality of

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HSs divided by a time span in which said client requests are received, (e.g. col. 30, line 13 – col. 31, line 63).

10. As per claim 4, Eyal teaches each of said plurality of server hotness categories are defined by a lower server hotness rating value and an upper server hotness rating value, (e.g. col. 30, line 13 – col. 31, line 63).

11. Claims 5 – 10, 13, 31 and 32 are rejected for similar reasons as stated above.

### ***Response to Arguments***

12. Applicant's arguments filed 10/29/2004 have been fully considered but they are not persuasive.

13. In the Remarks, Applicant argues in substance that Eyal does not teach, suggest or disclose at least multicasting from a content server at least one of the SM objects hosted thereon to a fraction of the plurality of HSs in the network, the fraction being determined according to the SM object's hotness category.

14. As to part 1, Examiner would like to point out to the Applicant that Eyal is not solely relied on to teach multicasting from said content server at least one of said SM objects hosted thereon to a fraction of said plurality of HSs in the network, said fraction being determined

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according to said SM object's hotness category, Herz is used for this teaching. Although, Eyal could also be relied upon to teach said fraction being determined according to said SM object's hotness category, as will be discussed below.

15. Furthermore, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

16. In the Remarks, Applicant argues in substance that there is absolutely no teaching, suggestion or disclosure in Eyal for such hotness rating as taught in the Applicants' Specification and claimed by at least the Applicants' claim 1. Eyal teaches listing media clips do not teach, suggest or disclose a hotness rating which defines the SM objects which are more frequently requested by clients for cache storage at the HSs. **That is, a user may rate a media clip with a high rating or vote for a media clip more than once because he/she likes that movie but that does not mean that the highly rated or voted on media clip is one that is most frequently requested by a client or clients. For example, a client may rate highly or vote more than once for a specific movie, but instead request a short clip or video more often than the movie highly rated or voted for because they do not have time to watch the entire movie and/or prefer to watch a short clip more often. Even further, if more movies or songs are added to a play-list, a user rating or preference list may have to be updated frequently as described in the Applicants' Specification as a problem with a prior art rating system. However, by using category-based approached (e.g., and a hotness rating as taught and**

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**claimed by the Applicants), a rating list does not have to be updated as in the prior art because the storage of SM objects is based on the most frequently requested SM objects (e.g., the hotness rating) and not a user specified ratings list as taught in Eyal.**

17. As to part 2, in response to applicant's argument, towards claim 1, that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., SM objects which are more frequently requested by clients for cache storage at the HSs) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). If the Applicant wishes to amend the claim language to teach this limitation, it could overcome the prior art but would require further search and consideration.

18. Furthermore, if the Applicant would draw their attention to the sections that were cited by the Examiner and columns in front of and after. In which the Applicant will see that if a user prefers a media clip, when they vote on the media clip the next time the user selects a play-list from the system, the system provides the play-list with the media clips that are most preferred, "hotness rating". If the user continually asks for there play-list, it is inherent that the user will have there favorite media clips played for them first in there play-list since the play-list is passed off the users highest rated media clips, (e.g., col. 29, lines 44 – 60, "*In an embodiment, rating module 1030 maintains a tally for each media clip. The tally compiles ratings received from playback module 1020. The ratings may be received from more than one user and/or user terminal. The tally may be implemented through a protocol that enables the rating module 1030*

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*to organize media clips according to an order. The organization of the media clips may correspond to a user preferential list, where preferred media clips are, for example, listed together or listed before less preferred clips. The rating module 1030 may also determine a genre, category, or other organization information through selections or entries received from the play-back module. The selections may be tallied through any protocol, such as summation, averages, weighted averages and moving averages. In another embodiment, the rating module 1030 may maintain a text field to store user comments regarding each media clip.” & col. 30, lines 5 – 7, “In an embodiment, the play-list 1042 are generated according to the current rating and/or rating for each media clip.”).*

19. Furthermore, Applicant also states that a rating list does not have to be updated as in the prior art because the storage of SM objects is based on the most frequently requested SM objects (e.g., the hotness rating) and not a user specified ratings list as taught in Eyal. Examiner would like to point out to the Applicant that, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the storage of SM objects is based on the most frequently requested SM objects) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

20. In the Remarks, Applicant argues in substance that there is absolutely no suggestion or motivation to combine the teachings of Eyal and Herz.



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21. As to part 3, Examiner would like to draw the Applicant's attention to Eyal, column 2, lines 29 – 44, which state, *"The network server receives a request for media playback from the network enabled device, selects multiple addresses from the database, and signal the multiple addresses to the network enabled device. The network server module control a media playback component on the network enabled device to use the addresses to automatically access and play back the media network resource associated with the addresses."* In this section of Eyal, one could interpret this as multicasting for it has characteristics of multicasting. Examiner would now like the Applicant to view Herz column 55, lines 40 – 67, which state, *"multicast trees are widely used in distribution of multimedia data in the Internet; for example, see "Scaleable Feedback Control for Multicast Video Distribution in the Internet," (Jean-Chrysostome Bolot, Thierry Turletti, & Ian Wakeman, Computer Communication Review, Vol. 24, #4, October, '94, Proceedings of SIGCOMM'94, pp. 58-67) or "An Architecture For Wide-Area Multicast Routing," (Stephen Deering, Deborah Estrin, Dino Farinacci, Van Jacobson, Ching-Gung Liu, & Liming Wei, Computer Communication Review, Vol. 24, #4, October, '94, Proceedings of SIGCOMM'94, pp. 126-135). While there are many possible trees that can be overlaid on a graph representation of a network, both the nature of the networks (e.g., the cost of transmitting data over a link) and their use (for example, certain nodes may exhibit more frequent intercommunication) can make one choice of tree better than another for use as a multicast tree. One of the most difficult problems in practical network design is the construction of "good" multicast trees, that is, tree choices which exhibit low cost (due to data not traversing links unnecessarily) and good performance (due to data frequently being close to where it is needed)."* As it can be seen, both references suggest that multicasting could be used in distributing

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multimedia data in the Internet. Furthermore, Examiner would like to state that not only is multicasting data well known in the art, but also multicasting enables select users to receive information, instead of broadcasting which allows all users on the network to receive the information, or point-to-point transmission which only enables two nodes to communicate, all of which is well known in the art.

22. In the Remarks, Applicant argues in substance that independent claims 5, 9 and 13 recite similar relevant features as those recited in claim 1, therefore they overcome the prior art as disclosed above.

23. As to part 4, Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

24. In the Remarks, Applicant argues in substance that dependent claims 2 – 4, 6 – 8, 10, 31 and 32 depend either directly or indirectly from independent claims 1, 5 and 9, respectively, and recites additional features thereof. As such, and for at least for the reasons recited above, the Applicants submit that these dependent claims are also not obvious and fully satisfy the requirements under 35 U.S.C. 103 and are patentable there under.

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25. As to part 5, Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

### ***Conclusion***

26. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. England whose telephone number is 571-272-3912. The examiner can normally be reached on Mon-Thur, 7:00-5:00.

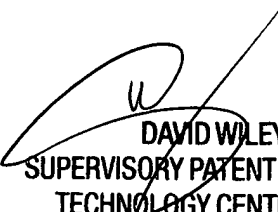
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David E. England  
Examiner  
Art Unit 2143

De



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